

City's efforts to save our hemlocks

Hemlocks live throughout this region and are a vital part of the City of Asheville's 22,000 acre watershed which includes the North Fork and Bee Tree reservoirs. Hemlocks have helped the watershed maintain its exceptional water quality by providing year round canopy cover which helps maintain moisture and moderate temperatures on the forest floor.

A tiny insect called Hemlock Woolly Adelgid infests hemlocks and within a few years kills them. These aphid-like insects are very small and barely visible to the naked eye. They are native to Japan and China and were first detected in the western United States in 1924. What is visible is a white, waxy "wool" that covers the adelgid. A sure sign of infestation is tiny cottony tufts at the base of the hemlock needles.

The hemlock tree could face the same fate as the American chestnut tree, which was eliminated through the chestnut blight. The loss of these trees dramatically changed the forest composition throughout the Southeast.

Biological control of the woolly adelgid through applying predator beetles which hunt and feed exclusively on the woolly adelgid has been found to help slow and control the adelgid spread. These tiny beetles only feed on the adelgid and once the food source is gone the beetles quit reproducing. Pesticides and insecticidal oils and soaps are not an option to use within the watershed, due to the potential of ground contamination having a negative affect on water quality.

The City of Asheville purchased 5,000 beetles in 2006 to help combat the woolly adelgid. The city has requested 5,000 more beetles which should be available in late winter or early spring 2008.

The City is also looking at other options concerning replacing trees that cannot be saved or have already died from the infestation. Other evergreen trees are being looked at to determine their suitability for planting within the watershed.

Every effort will be made by City staff, working with the National Forest Service, to save as many hemlocks as possible and to maintain the high water quality within the City of Asheville watershed.

For more information concerning our efforts to save the hemlocks please contact Leslie Carreiro, Water Production Superintendent, or Lee Hensley, Watershed Supervisor, at (828) 271-6100.